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ABSTRACT

A representative sample of first-time, full-time freshmen attending 17 Kansas community colleges in fall 1985 were tracked through spring 1990. Eight separate surveys were mailed to between 50 and 100 freshmen at each college, receiving a final response rate of 82.8%. Study findings included the following: (1) 71% of the respondents who initially planned to transfer had accomplished that goal by 1990, with 27.2% of the transfers attending other Kansas community colleges, 20.8% attending out-of-state colleges, and 88.7% attending Kansas four-year colleges or universities; (2) although the majority of respondents remained full-time students and earned a certificate or degree by spring 1990, the persistence and certificate/degree attainment rate of respondents from Johnson County Community College (JCCC), the largest community college in Kansas in an affluent suburb of Kansas City, was surprisingly much lower than respondents from other Kansas community colleges; (3) the greatest percentage of JCCC respondents who provided reasons for not attaining their educational objective indicated that they had either lost interest of were still working on it; (4) the majority of respondents expressed satisfaction with both their overall experience and their educational achievements; and (5) verbatim survey responses indicated the need for better preparation of transfer students for the substantial increase in pressure and expectations at four-year institutions; and the students' need for more assistance in developing satisfying, comfortable social lives within the community college setting. To address these concerns, several initiatives have been implemented at JCCC such as increasing the number of student activities on campus and bringing university personnel to community college campuses to provide insight and advice to potential transfer students. Contains 16 references. (KP)

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Community College Students' Persistence and Goal Attainment: A 5-Year Longitudinal Study

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Abstract

A representative sample of first-time, full-time freshmen attending 17 Kansas community colleges in fall of 1985 were tracked through the spring of 1990 to develop insights into the personal and educational experiences of this segment of the community college student population over time. This paper provides an overview of selected results and a comparison between outcomes of students initiating their studies at Johnson County Community College (JCCC), the largest community college in Kansas located in an affluent suburb of Kansas City, and those initiating their studies at other smaller, primarily rural community colleges. A discussion of the methodology employed and suggestions for enhancing returns for those wishing to conduct a similar statewide study are provided. Recommendations resulting from the study, including initiatives which have been implemented to enhance community college students' social experiences and their ease of transfer to a 4-year college or university, are also described.

Introduction

The principal purpose of community colleges is unquestionably to help students learn and reach their educational objectives (Palmer, 1990). Leading educational researchers have also expressed the view that a college education should involve changes not just in substantive learning and cognitive and intellectual competence, but in a variety of interpersonal and psychosocial areas as well (Pascarella & Terenzini, 1991). Furthermore, an understanding of the persistence/attrition phenomenon is necessary if an institution is to develop programs that facilitate attainment of the educational goals of each entering student (Brigman & Jacobs, 1979).

Thus, in July of 1985, the Kansas Council of Community College Presidents commissioned the JCCC Office of Institutional Research to coordinate a 5-year longitudinal study of representative groups of first-time, full-time students attending community colleges throughout the state. The primary purpose of this study was to document the academic and career progress of these students from first entry into college to subsequent experiences after leaving the community college. Secondary objectives were to provide community colleges with an evaluation of students' success in reaching their personal, academic, and career objectives; to determine the variables that affect progress in achieving those objectives; to enhance understanding of the growth and development of study participants over time; to provide insights into factors affecting community college attrition; and to determine when attrition may not, in fact, be attrition (e.g., when students stop out for a period of time, transfer laterally rather than horizontally, or resume their education out of state).

Review of the Literature

The Kansas study differs from most other published studies in that it describes a *statewide* longitudinal study designed to periodically survey *first-time, full-time* community college students over a *5-year* period of time. It did not terminate with results of a single follow-up effort, nor did it rely on existing databases. One other study, conducted by the Wyoming Community College Commission between 1987 and 1992, utilized the Kansas study design and involved periodically surveying a total of 181 randomly selected first-time, full-time students attending one of the seven community colleges in Wyoming (Kitchen, 1993). Their primary findings closely paralleled those of the Kansas study.

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Although less recent, another interesting study somewhat similar in nature to the Kansas study was a statewide longitudinal study conducted by the Center for the Study of Community Colleges. This study tracked 6,940 students who first enrolled in one of 15 California community colleges in fall of 1978. All college records were extensively reviewed, and between two and five telephone interviews were conducted with participating students over a 3-year period (Sheldon, 1982).

Numerous other approaches have been used by researchers to document students' academic and career progress as well. Follow-up studies of community college students have been conducted via mail or telephone surveys for some time to meet federal and state reporting requirements, to elicit useful data for planning and decision making, and as a component of overall assessment of institutional effectiveness. Arizona's Maricopa County Community College District and the Community College of Denver, for example, are often mentioned by educators as colleges that have achieved success in tracking their students (Phillip, 1993).

Studies have also been conducted through analyses of an individual college's academic records to observe the performance and achievement of students over an extended period of time (Lucas, 1993; Tichenor & Cosgrove, 1992). Other community colleges have utilized state databases or conducted secondary analyses of the U.S. Department of Education's longitudinal databases (Clagett, 1991; Palmer, 1992).

In addition to studies conducted by individual community colleges, various state and federal agencies have developed statewide databases which have been utilized to determine student outcomes and track academic and career progress. For example, the Maryland State Board for Community Colleges, in cooperation with the 17 community colleges and the Maryland Higher Education Commission, had developed a reporting index called the "Success Rate" to track the graduation, transfer, and enrollment status of students who were first-time, full-time students four years earlier (McConochie & Rajasekhara, 1992).

The Illinois Community College Board (ICCB), recently created a shared enrollment and graduation database of over 5 million individual student records from both 2-year and 4-year Illinois public colleges and universities for FY 1983 through FY 1993. After considerable study of the two predominant methodologies for calculating transfer rates—the model from the Center for the Study of Community Colleges at the University of California Los Angeles (UCLA/Cohen) which tracks an entering student cohort, and the National Effectiveness Transfer Consortium model (NETC/BW Associates) which tracks an existing student cohort—the ICCB developed their own method of calculating transfer rates, using adaptations of these two national transfer rate models in tracking their students who remain in the state system (Illinois Community College Board, 1994).

These and other similar studies provide valuable contributions to the body of knowledge detailing student educational progress and achievement.

Methodology

The Kansas study consisted of a total of eight surveys administered between fall 1985 and summer 1990. A steady decline in the number of respondents was realized throughout the majority of the study, but the response rate increased dramatically when nonrespondents to the spring 1990 mail survey were traced via telephone. Design and implementation of the study encompassed the following steps:

1. Each participating college was asked to select a group of 50 to 100 representative first time, full-time freshmen who agreed in writing to have their progress followed over a 5-year period, and to solicit from them a signed participation agreement form. "First-time" was defined as those students with no known previous education at the postsecondary level. "Full-time" was defined as those students who were enrolled in 12 or more credit hours as of the 20th day of the fall 1985 semester. Seventeen of the 19 Kansas community colleges chose to participate, and the resulting sample was surveyed in the fall of 1985. The 641 respondents to this initial survey became the Kansas community colleges' "Class of 1987" student sample (see Table 1).

2. Participating colleges followed up members of their study group every fall and spring for the first 3 years and in spring only for the final 2 years, using surveys designed by the JCCC Office of Institutional Research to insure collection of comparable data. Two mailings with cover letters signed by the president of each participating institution were sent approximately 3 weeks apart during each follow-up attempt.

3. The JCCC Office of Institutional Research provided sample letters of transmittal and sufficient copies of each survey to all participating colleges, and suggested mailing dates deemed most advantageous to elicit a maximum response. Completed surveys (or copies) were forwarded to JCCC for data entry, storage and analysis.

4. Attempts were made to reach all nonrespondents to the final survey by telephone during the summer of 1990, utilizing phone numbers collected on previously completed surveys and emergency numbers from the 1985 participant agreements.

5. A 2-year interim report detailing results of the first four surveys was published and disseminated in the fall of 1987, and two final reports were published and disseminated in 1991. One of these final reports described statewide findings by topic, and the other chronologically detailed findings for JCCC respondents compared to results for respondents initiating their studies at one of the other Kansas community colleges.

Summary of Results

The eight surveys administered between 1985 and 1990 elicited a wealth of data describing respondents' perceptions, opinions, and experiences. These are important findings, given the recent emphasis on achievement of students' educational objectives as

Table 1
Kansas Community Colleges' "Class of 1987"
Longitudinal Study Completed Surveys

Kansas Community College	Fall 1985 Sample	Spring 1990 Respondents	Percent of 1985
Allen County Community College	18	11	61.1%
Barton County Community College	35	29	82.9
Butler County Community College	49	38	77.6
Cloud County Community College	30	22	73.3
Colby Community College	37	31	83.8
Cowley County Community College	17	3	17.6
Dodge City Community College	28	10	35.7
Fort Scott Community College	47	26	55.3
Garden City Community College	50	26	52.0
Highland Community College	36	28	77.8
Hutchinson Community College	26	16	61.5
Independence Community College	76	41	53.9
Johnson County Community College	53	43	81.1
Kansas City Kansas Community College	24	16	66.7
Labette Community College	40	31	77.5
Pratt Community College	50	24	48.0
Seward County Community College	25	19	76.0
Total	641	414	64.6%

Note. **Adjusted response rate was 82.8% after correction for study participants who had no opportunity to respond, i.e., deceased or impossible to locate due to lack of viable addresses or telephone numbers.**

Table 2
Educational Experiences: Fall 1985 to Spring 1990

Item	Others	JCCC
Overall College Attendance Pattern		
Consistent full-time student	72.8%	58.1%
Consistent part-time student	2.7	2.3
Consistent student (always *either* full-or part-time)	8.6	16.3
Stop-out student	13.2	14.0
Drop-out	1.9	9.3
Unknown	0.8	0.0
Attended Other Colleges/Universities		
No/unknown	28.9%	37.2%
Yes, one other	49.6	30.2
Yes, two or more others	21.5	32.6
Type of Other Colleges Attended[1]		
Other Kansas community college(s)	27.2%	22.2%
Other Kansas 4-year colleges/universities	88.7	92.5
Out-of-state colleges/universities	20.8	37.0

Note. [1]Multiple response item; percentages are not additive.

Table 3
Educational Attainment

Item	Others	JCCC
Highest Level of Education Achieved by 1990		
Some college, no degree	19.1%	39.5%
Vocational certificate	3.2	4.7
Associate's degree	36.1	16.3
Bachelor's degree	36.9	39.5
Not degree-seeking/unknown	4.7	0.0
1985 Degree Intent[1]		
Some college, no degree	2.5%	2.3%
Vocational certificate	4.7	0.0
Associate's degree	17.2	11.6
Bachelor's degree	42.4	46.5
Master's degree	22.4	20.9
Doctoral/professional degree	9.4	14.0
Unknown	1.4	4.7
Currently Enrolled		
Yes	30.5%	41.9%
No	69.3	55.8
Unknown	0.2	2.3

Note. [1]1985 results have been adjusted to reflect only those respondents who also completed the 1990 survey.

Table 4
Achievement of Educational Objective

Item	Others	JCCC
Percent Who Achieved 1985 Objective		
By Category of Objective		
Transfer to 4-year college/university	76.1%	70.8%
Develop or improve job skills	84.0	44.4
Other/unknown	76.7	70.0
Time Needed to Achieve 1985 Objective		
2 years or less	34.3%	12.2%
2 1/2 to 5 years	43.5	56.1
Not achieved	22.2	31.7
Why Objective Not Achieved		
Changed lifestyle (marital status, children, work)	17.9%	15.4%
Changed goals	14.7	7.7
Ran out of money	14.7	0.0
Still working on it	13.7	23.1
Had problems with CC or transfer	3.2	0.0
Lost interest	2.1	23.1
Unknown	33.7	30.7

major indices of institutional effectiveness for community colleges (Walleri, Seybert, & Cosgrove, 1992). Four primary topics have been selected for inclusion in this article: transfer, persistence, educational goal attainment, and satisfaction with the community college experience.

Transfer.

Three out of four respondents to the Kansas study who initially planned to transfer to a 4-year college or university had accomplished that goal by 1990, with a greater percent of respondents from other Kansas community colleges reporting transfers to one or more other colleges or universities than was true for JCCC respondents. Of note is the relatively large percent of respondents who had transferred from one Kansas community college to another, or had attended two or more colleges or universities after leaving their community college of origin (see Table 2).

If these findings mirror typical enrollment patterns of first-time, full-time community college students nationwide, results of follow-up studies which are predicated on the belief that students "progress" from the community college to a single 4-year college or university within the same state may seriously overestimate attrition rates and underestimate achievement of bachelor's degrees over time.

Persistence and educational goal attainment.

Although the majority of respondents remained full-time students and had earned a certificate or degree by spring 1990, the persistence and certificate/degree attainment rate of JCCC respondents was much lower than that of respondents from other Kansas community colleges (see Tables 2 and 3). These findings were somewhat surprising in view of the fact that over 40% of Johnson County adults hold a bachelor's degree or higher, and the average per capita income ranks higher than 99% of all counties in the nation. Since educational level and affluence of parents have been cited as contributing factors in the academic success of children, the assumption had been that JCCC students would be more likely to persist and to attain their educational goals than students from other Kansas community colleges.

The greatest percent of JCCC respondents who provided reasons for not attaining their educational objective indicated they had either lost interest or were still working on it (see Table 4). Another factor which may have contributed to the difference in persistence and certificate/degree attainment was the greater percent of JCCC than other respondents who were employed both in 1985 and in 1990 (see Table 5).

JCCC respondents were amazingly consistent in their stated degree intentions, despite their slower progress in achieving their educational goals. Approximately 8 out of 10 had planned to earn a bachelor's degree or higher in 1985, and by 1990 fully 8 out of 10 still eventually planned to do so. Over 40% of JCCC respondents were enrolled in 1990 and, of those, one in three were still attending JCCC and planned to re-enroll at JCCC the following year. The Wyoming study reported similar findings, with 42% of their survey respondents still enrolled at the end of 5 years and 21% of those still attending a 2-year institution (Kitchen, 1993). If indicative of enrollment patterns for similar first-time, full-time community college students nationwide, the criteria detailed in the Student Right-to-Know and Campus Security Act (Congressional Record, 1990) which specify using 150% of normal time to completion to calculate the required completion rates may be somewhat unrealistic.

Several other studies have validated the finding that, for many students, 150% of normal time is insufficient to achieve their educational objective. The California study reported that fully 32% of study participants initially enrolling at a California community college as full-time students with an identified transfer objective in the fall of 1978 were *still* enrolled at the community college when the study terminated 3 years later (Sheldon, 1982). The High School and Beyond study found that only one in three high school seniors interviewed to ascertain their expectations for progress in postsecondary education in 1980 had achieved a level of education equal to their expectations by 1986 (Eagle, Fitzgerald, Gifford, Zuma, MPR Associates, Carroll, 1988). Furthermore, the Educational Testing Service reported that only one-half of the nation's top high school seniors in 1980 (those in the top 25% of national test scores) had earned a bachelor's degree by 1987 (Office of Educational Research and Improvement, 1993).

Satisfaction.

Satisfaction with the community college was measured in a variety of ways and elicited very positive results. Perhaps the strongest measure of satisfaction was derived from the vast majority of respondents who indicated they would recommend the community college to friends, would encourage their own children to attend a community college, and, if starting now, would attend the same community college again (see Table 5). Similar results were reported for the Wyoming study (Kitchens, 1993).

The community college was credited with providing a good start toward a bachelor's program by a large majority of respondents. Of note, however, is the much smaller percent who reported little problem *adjusting* to a 4-year college when transferring (see Table 5).

Conclusions, Consequences, and Recommendations.

Survey results indicate that overall the Kansas community colleges' programs have been fairly effective, and several important components of the community college mission were accomplished as these colleges strove to meet the various educational needs of their full-time, first-time freshmen. The majority of respondents expressed satisfaction with their community college experiences and their educational achievements.

Table 5
Employment History & Measures of Satisfaction

Item	Others	JCCC
Employed in 1985	52.9%	84.9%
Employed in 1990	84.3	90.7
Would recommend community college attendance to friends	86.2	94.1
Would encourage own children to attend the community college	81.6	76.5
If starting now, would attend the same community college again[1]	81.1	79.4
Community colleges provided a good start toward a bachelor's degree[1]	87.9	95.4
There was little problem adjusting to a 4-year college when transferring[1]	52.6	40.4

Note. [1] Data were collected utilizing a 5-point scale with two positive responses, a neutral response, and two negative responses. The percentages cited include the two positive responses combined, i.e., "definitely" and "probably" or "strongly agree" and "somewhat agree."

Two recurring themes were apparent in the verbatim comments—the need for preparing transfer students for the substantial differences in pressures and expectations at 4-year colleges and universities (also a recommendation in the Wyoming study, Kitchens, 1993), and for assisting students of all ages to develop satisfying, comfortable social lives within the community college setting.

Several initiatives have been instituted at JCCC which address these concerns. The number of student activities have nearly tripled since the study was concluded, from 50 to 140, and the number of active student organizations and special interest groups sponsored by the college has more than doubled, from 15 to 32. Gathering places have also been added where students can easily and comfortably congregate, including outdoor tables and chairs and an Espresso bar in an accessible corner lounge.

To assist students in minimizing the trauma of transferring to a major university, an arrangement called "The KU Connection" was introduced two years ago. This program brings personnel from the University of Kansas (JCCC's primary recipient institution) on campus to provide helpful insights and advice to potential JCCC transfer students to enhance their understanding of how the system at the university differs from that of the community college. Similar initiatives have also been instituted at several other Kansas community colleges.

Although these steps are a good beginning, more ways must be found and resources provided to bring the social experiences of all community college students closer to those of their 4-year college and university peers, and to adequately prepare them for successful transition to the 4-year college or university of their choice.

Results of this study indicate legislation such as the Student Right to Know and Campus Security Act (Congressional Record, 1990) may employ unrealistic standards regarding both the "typical" students' persistence to completion and their transfer patterns. For many students, attainment of educational goals may constitute a lengthy endeavor with far more "turns in the road" than are usually acknowledged by lawmakers and even by some educational planners and policy makers.

Suggested Improvements.

The study elicited many useful results both for JCCC and for the other participating Kansas community colleges. As with all such first-time efforts, however, experience became a valuable teacher. Several changes would be suggested if such a study were initiated in Kansas again, namely: 1) a larger sample of participants at each community college, 2) more control over sample selection, 3) participation agreements housed at JCCC, and 4) all mailings conducted directly from JCCC.

For a longitudinal study in particular to be successful, the researcher in charge must utilize the utmost care in administration of all facets of the project. In this study, control of several vital components of the study was delegated to each participating community college, which resulted in a few unfortunate consequences. For example, after administration of the original survey, the majority of participating institutions wound up with less than 40 students in their "Class of 1987" sample, even though the criteria requested 50 to 100 study participants at each college (see Table 1). Furthermore, although a random sample was encouraged, there was no guarantee that each college utilized this method of identifying potential study participants.

Staff at several participating community colleges changed over time and, in the process, participation agreements and mailing lists were misplaced. This created extra work for the JCCC staff in reviewing previously completed surveys to locate the most recent addresses and restructure mailing lists for those colleges.

Although most of the participating colleges were diligent in their efforts to elicit maximum responses for each survey administered, six of the colleges neglected to send at least two of the eight follow-up surveys at all. Furthermore, misplaced participation agreements severely hampered the 1990 efforts to locate nonrespondents since this was the only documentation of names and addresses of relatives or friends who would always know where to locate each study participant. Many of these same difficulties were reported for the California state longitudinal study as a result of delegation of responsibilities to coordinators at each of the 15 participating California community colleges (Sheldon, 1982).

Despite these difficulties, survey respondents did prove to be representative of Kansas first-time, full-time community college students as a whole. Thus, the results were useful in documenting student outcomes over time and enhancing understanding of the factors which contribute to the success or failure of this segment of the community college population in achieving their personal and educational goals.

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